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HAROLD LEGGETT, PH.D.
SECRETARY

State of Louisiana
DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

Certified Mail No.:

Agency Interest No. 31293
Activity No. PER20080002

Mr. David Lewis
Regulatory Manager
Dune Operating Company
777 Walker Street, Suite 2450
Houston, TX 77002

RE: Permit Modification, Bayou Couba Central Facility, Dune Operating Company, Paradis, St. Charles Parish, Louisiana

Dear Mr. Lewis:

This is to inform you that the permit modification request for the above referenced facility has been approved under LAC 33:III.501. The submittal was approved on the basis of the emissions reported and the approval in no way guarantees the design scheme presented will be capable of controlling the emissions as to the types and quantities stated. A new application must be submitted if the reported emissions are exceeded after operations begin. The synopsis, data sheets, and conditions are attached herewith.

It will be considered a violation of the permit if all proposed control measures and/or equipment are not installed and properly operated and maintained as specified in the application.

Also enclosed is a document entitled "General Information." Please be advised that this document contains a summary of facility-level information contained in LDEQ's TEMPO database and is not considered a part of the permit. Please review the information contained in this document for accuracy and completeness. If any changes are required or if you have questions regarding this document, you may contact Ms. Tommie Milam, Permit Support Services Division, at (225) 219-3259 or email your changes to facupdate@la.gov.

Please be advised that pursuant to provisions of the Environmental Quality Act and the Administrative Procedure Act, the Department may initiate review of a permit during its term. However, before it takes any action to modify, suspend or revoke a permit, the Department shall, in accordance with applicable statutes and regulations, notify the permittee by mail of the facts or operational conduct that warrant the intended action and provide the permittee with the opportunity to demonstrate compliance with all lawful requirements for the retention of the effective permit.

The permit number cited below and agency interest number cited above should be referenced in future correspondence regarding this facility.

Done this _____ day of _____, 2009.

Permit No.: 2520-00095-01

public notice

**AIR PERMIT BRIEFING SHEET
AIR PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

**Bayou Couba Central Facility
Agency Interest No.: 31293
Dune Operating Company
Paradis, St. Charles Parish, Louisiana**

I. BACKGROUND

Dune Operating Company owns and operates the Bayou Couba Central Facility, an existing oil and gas production facility. The site currently operates under Permit No. 2520-00095-00, issued August 23, 2005.

II. ORIGIN

A permit application and Emission Inventory Questionnaire (EIQ) dated November 10, 2008 were received requesting a permit modification.

III. DESCRIPTION

The Bayou Couba Central Facility is a typical crude oil and natural gas production facility where production streams from several wells are routed to a separator. A natural gas fired compressor engine boosts the natural gas stream pressure to pipeline acceptable levels. Moisture content of the gas stream is lowered through the use of a glycol dehydration system. After the natural gas is pressurized and dehydrated, a portion of the stream is used as fuel at the facility and for gas lift operations. The remainder of the gas is sent off-site for sales via a natural gas pipeline. Vapors from the glycol still column are sent to a condenser where the vapors are condensed, collected and mixed with the crude oil.

The saltwater and crude oil stream from the separator are routed to heater treaters for further separation. The water stream is routed to saltwater storage tanks and disposed of in saltwater disposal wells via natural gas fired pump engines. The crude oil stream is routed to crude oil storage tanks until transported to sales via pipeline.

Dune Operating Company proposes the following:

1. Deletion of the following emission points: three oil storage tanks (Emission Points TNK1, TNK2 and TNK3), barge loading (Emission Point LOAD1), two compressor engines (Emission Points COMP1 and COMP2), an oil loading engine (Emission Point ENG2) and three chemical pumps (Emission Points P9, P10 and P11).
2. Addition of the following emission points to the inventory list: a heater treater (Emission Point HT2), five internal combustion engines (Emission Points COMP3, GEN2, ENG3, ENG4 and ENG5), two saltwater tanks (Emission Points TNK4 and TNK5), three crude oil storage vessels (Emission Points 001, 002 and 003), a scrubber vessel (Emission Point 004) and

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Paradis, St. Charles Parish, Louisiana**

pneumatic controllers (Emission Point CONTR). These emission points were installed previously.

3. An emissions tank cap for oil storage tanks 001, 002 and 003. This cap is necessary to ensure the minor source status of the facility.

Estimated emissions from this facility in tons per year are as follows:

Pollutant	Before	After	Change
PM ₁₀	0.41	0.53	+ 0.12
SO ₂	0.02	0.36	+ 0.34
NO _x	95.89	41.60	- 54.29
CO	95.77	54.62	- 41.15
VOC	83.40	79.42	- 3.98

VOC speciation in tons per year:

LAC 33:III. Chapter 51 Toxic Air Pollutants (TAP)	Emissions in Tons per year
Benzene	1.08
Toluene	0.72
Ethyl benzene	0.11
Xylene	0.28
n-Hexane	2.26
Acetaldehyde	0.04
Formaldehyde	0.07
1,3 Butadiene	0.03
Total TAP	4.59
Other VOC	74.83
Total VOC	79.42

IV. TYPE OF REVIEW

This permit was reviewed for compliance with Louisiana Air Quality Regulations and National Emission Standards for Hazardous Air Pollutants (NESHAP). New Source Performance Standards (NSPS) and Prevention of Significant Deterioration (PSD) do not apply.

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Paradis, St. Charles Parish, Louisiana**

This facility is a minor source of LAC 33:III.Chapter 51 Toxic Air Pollutants (TAPs) and an area source of 40 CFR 63 Subpart HH – National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities.

V. PUBLIC NOTICE

Public notice is required due to a federally enforceable condition limiting total VOC emissions below the major source threshold. A notice requesting public comment on the permit was published in *The Advocate*, Baton Rouge, on <date>, 200X; and in the <local paper>, <local town>, on <date>, 200X. A copy of the public notice was mailed to concerned citizens listed in the Office of Environmental Services Public Notice Mailing List on <date>. All comments will be considered prior to the final permit decision.

VI. EFFECTS ON AMBIENT AIR

Emissions associated with the proposed facility were reviewed by the Air Quality Assessment Division to ensure compliance with the NAAQS and AAS. LDEQ did not require the applicant to model emissions.

Dispersion Model(s) Used: None

VII. GENERAL CONDITION XVII ACTIVITIES

Work Activity	Schedule	Emission Rates - tons				
		PM ₁₀	SO ₂	NO _X	CO	VOC
None						

**AIR PERMIT BRIEFING SHEET
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**Bayou Couba Central Facility
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VIII. INSIGNIFICANT ACTIVITIES

ID No.:	Description	Citation
	<250 gallons Lube Oil Days Tanks (5)	LAC 33:III.501.B.5.A.2
	<250 gallons Antifreeze Tank (1)	LAC 33:III.501.B.5.A.2
	55 gallons Glycol Dehydration System Condensate Tank (1)	LAC 33:III.501.B.5.A.2
	<250 gallons Engine Catch Basins (2)	LAC 33:III.501.B.5.A.2
	55 gallons Methanol Drum	LAC 33:III.501.B.5.A.2
	55 gallons Demulsifier Chemical Drum	LAC 33:III.501.B.5.A.2
	180 gallons Diesel Fuel Tank	LAC 33:III.501.B.5.A.2
	<250 gallons Diesel Fuel Tank	LAC 33:III.501.B.5.A.2
	30 gallons Sump	LAC 33:III.501.B.5.A.2
	120 gallons Sump	LAC 33:III.501.B.5.A.2
	700 gallons Sump	LAC 33:III.501.B.5.A.3
	500 gallons Lube Oil Day Tank	LAC 33:III.501.B.5.A.3
	500 gallons Lube Oil Day Tank Catch Pan	LAC 33:III.501.B.5.A.3
	300 gallons Antifreeze Day Tank	LAC 33:III.501.B.5.A.3
	300 gallons Antifreeze Day Tank Catch Pan	LAC 33:III.501.B.5.A.3
	<10,000 gallons Engine Catch Basin	LAC 33:III.501.B.5.A.3
	<10,000 gallons Barge Sump	LAC 33:III.501.B.5.A.3

General Information

AJ ID: 31293 Bayou Coubia Central Facility
 Activity Number: PER20080002
 Permit Number: 2520-00095-01
 Air - Minor (Synthetic) Initial

Also Known As:	ID	Name	User Group	Start Date
	2520-00095	Bayou Coubia Central Facility	CDS Number	03-24-2004
LA0120812	LPDES #	LPDES Permit #	LPDES Permit #	05-17-2005
LAG33A768	LPDES #	LPDES Permit #	LPDES Permit #	01-03-2008
	Dune Operating Co	Multimedia	Multimedia	09-01-2007
G-089-11505	Site ID #	Solid Waste Facility No.	Solid Waste Facility No.	08-28-2002
120955	Central Tank Battery	TEMPO Merge	TEMPO Merge	05-11-2005
Physical Location:				
	9.15 Mi NW of Paradis, LA 70000			
Mailing Address:	777 Walker St Ste 2450 Houston, TX 77002			
Location of Front Gate:	29° 46' 50" 1 hundredths latitude, 90° 17' 6" 9 hundredths longitude, Coordinate Method: Lat/Long - DMS, Coordinate Datum: NAD83			
Related People:	Name	Mailing Address	Phone (Type)	Relationship
Hal Bettis	777 Walker St Ste 2450 Houston, TX 77002	7132296300 (WP)	Responsible Official for Water Permit Contact For Water Permit Contact For Responsible Official for	
Hal Bettis	777 Walker St Ste 2450 Houston, TX 77002	7132296300 (WP)		
Hal Bettis	777 Walker St Ste 2450 Houston, TX 77002	7132296300 (WP)		
Hal Bettis	777 Walker St Ste 2450 Houston, TX 77002	7132296300 (WP)		
Related Organizations:	Name	Address	Phone (Type)	Relationship
Dune Energy Inc	777 Walker St Ste 2450 Houston, TX 77002	7132309590 (WF)	Owens	
Dune Energy Inc	777 Walker St Ste 2450 Houston, TX 77002	7132296300 (WP)	Owens	
Dune Operating Co	777 Walker St Ste 2450 Houston, TX 77002	7132296300 (WP)	Water Billing Party for Water Billing Party for	
Dune Operating Co	777 Walker St Ste 2450 Houston, TX 77002	7132309590 (WF)	Water Billing Party for Water Billing Party for	
Dune Operating Co	777 Walker St Ste 2450 Houston, TX 77002	7132309590 (WP)	Air Billing Party for Air Billing Party for	
Dune Operating Co	777 Walker St Ste 2450 Houston, TX 77002	7132309590 (WF)	Air Billing Party for Air Billing Party for	
Dune Operating Co	777 Walker St Ste 2450 Houston, TX 77002	7132296300 (WP)	Operates	
Dune Operating Co	777 Walker St Ste 2450 Houston, TX 77002	7132309590 (WF)	Operates	

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INVENTORIES

AI ID: 31293 - Bayou Couba Central Facility
Activity Number: PER20080002
Permit Number: 2520-00095-01
Air - Minor (Synthetic) Initial

Subject Item Inventory:	ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
Bayou Couba Central Facility							
EQT 0001	GLYEX	Glycol Reboiler					8760 hr/yr
EQT 0009	ENG1	Waukesha Saltwater Pump Engine (model F1197)	209 horsepower	1 MM BTU/hr	144 horsepower	8760 hr/yr	8760 hr/yr
EQT 0011	GEN1	Caterpillar Generator Engine (model 3304)			80 horsepower		8760 hr/yr
EQT 0012	HT1	Heater Treater			1.5 MM BTU/hr		8760 hr/yr
EQT 0013	P1	Pneumatic Pump			1500 scf/hr		26 hr/yr
EQT 0014	P2	Pneumatic Pump			1500 scf/hr		26 hr/yr
EQT 0015	P3	Pneumatic Pump			900 scf/hr		26 hr/yr
EQT 0016	P4	Pneumatic Pump			600 scf/hr		6 hr/yr
EQT 0017	P5	Pneumatic Pump			600 scf/hr		4380 hr/yr
EQT 0018	P6	Pneumatic Pump			600 scf/hr		4380 hr/yr
EQT 0019	P7	Pneumatic Pump			1500 scf/hr		8760 hr/yr
EQT 0020	P8	Pneumatic Pump			1500 scf/hr		26 hr/yr
EQT 0024	GLYNT	Glycol Reboiler Moisture Vent/VRU		2.9 MM ft ³ /day	2.9 MM ft ³ /day		8760 hr/yr
EQT 0025	HT2	Heater Treater			2 MM BTU/hr		8760 hr/yr
EQT 0026	COMP3	Caterpillar Compressor Engine (model 3508)			670 horsepower		8760 hr/yr
EQT 0027	GEN2	Cummins Diesel Generator Engine (model 6BT5.8-G6) (backup)			155 horsepower		52 hr/yr
EQT 0028	ENG3	Moline Saltwater Pump Engine (model 605) (backup)			75 horsepower		8760 hr/yr
EQT 0029	ENG4	Waukesha Crude Oil Pipeline Pump Engine (model VRG 220)			53 horsepower		8760 hr/yr
EQT 0030	VRG5	Detroit Diesel Crude Oil Transfer Pump Engine (model 471)			120 horsepower		2184 hr/yr
EQT 0031	TNK4	Saltwater Skimmer Tank	8820 gallons				8760 hr/yr
EQT 0032	TNK5	Saltwater Surge Tank	12600 gallons				8760 hr/yr
EQT 0033	001	Crude Oil Storage Vessel	168630 gallons	182500 bbl/yr			8760 hr/yr
EQT 0034	002	Crude Oil Storage Vessel	90384 gallons	182500 bbl/yr			8760 hr/yr
EQT 0035	003	Crude Oil Storage Vessel	90384 gallons	182500 bbl/yr			8760 hr/yr
EQT 0036	004	Scribbler Vessel	528 gallons				8760 hr/yr
EQT 0037	CONTR	Pneumatic Controllers					8760 hr/yr
FUG 0001	FUGAREA	Fugitive Emissions					8760 hr/yr
Stack Information:							
ID	Description	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Temperature (oF)
Bayou Couba Central Facility							
EQT 0001	GLYEX	Glycol Reboiler	4.09	.31	.4	20	500
EQT 0009	ENG1	Waukesha Saltwater Pump Engine (model F1197)	172.08	507	.25	8	1000
EQT 0011	GEN1	Caterpillar Generator Engine (model 3304)	95.6	282	.25	10	1000

INVENTORIES

AI ID: 31293 - Bayou Couba Central Facility
 Activity Number: PER20080002
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 Air - Minor (Synthetic) Initial

Stack Information:		Description	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Temperature (°F)
Bayou Couba Central Facility								
EOT 0012	HT1 - Heater Treater		9.82	463	1	.17	35	500
EOT 0024	GLYNT - Glycol Reboiler Moisture Vent/VRU						10	75
EOT 0025	HT2 - Heater Treater		3.27	617	2		35	500
EOT 0026	COMP3 - Caterpillar Compressor Engine (model 3508)		50.04	2358	1		20	1000
EOT 0027	GEN2 - Cummins Diesel Generator Engine (model 6BT5.9-G6) (backup)		110.36	325	.25		8	450
EOT 0028	ENG3 - Moline Saltwater Pump Engine (model 605) (backup)		89.63	264	.25		8	1000
EOT 0029	ENG4 - Waukesha Crude Oil Pipeline Pump Engine (model VRG 220)		63.34	187	.25		8	1000
EOT 0030	ENG5 - Detroit Diesel Crude Oil Transfer Pump Engine (model 471)		85.44	252	.25		10	450
EOT 0031	TNK4 - Saltwater Skimmer Tank				12		15	77.52
EOT 0032	TNK5 - Saltwater Surge Tank				.25		20	77.52
EOT 0033	001 - Crude Oil Storage Vessel				.17		10	77.52
EOT 0034	002 - Crude Oil Storage Vessel				.17		10	77.52
EOT 0035	003 - Crude Oil Storage Vessel				.17		10	77.52
EOT 0036	004 - Scrubber Vessel				.25		15	77.52

Relationships:

Subject Item Groups:		Group Type		Group Description		Member of Groups	
ID	Equipment Group			- Tank Cap			
GRP 0002				- Bayou Couba Central Facility			
UNF 0001	Unit or Facility Wide						
Group Membership:		Description		Member of Groups			
ID							
EOT 0035	001 - Crude Oil Storage Vessel			GRPO0000000002			
EOT 0034	002 - Crude Oil Storage Vessel			GRPO0000000002			
EOT 0036	003 - Crude Oil Storage Vessel			GRPO0000000002			

NOTE: The UNF group relationship is not printed in this table. Every subject item is a member of the UNF group

Annual Maintenance Fee:

Fee Number	Air Contaminant Source	Multipiler	Units Of Measure
0040	0040 Crude Oil and Natural Gas Production (Less than 100 T/Yr Source)		

INVENTORIES

AI ID: 31293 - Bayou Coubia Central Facility
Activity Number: PER20080002
Permit Number: 2520-00095-01
Air - Minor (Synthetic) Initial

SIC Codes:	Crude petroleum and natural gas	AI 31293
1311	Crude petroleum and natural gas	UNF 001
1311	Crude petroleum and natural gas	

EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 31293 - Bayou Couba Central Facility
Activity Number: PER20080002
Permit Number: 2520-00095-01

Air - Minor (Synthetic) Initial

Subject Item	CO			NOx			PM10			SO2			VOC		
	Avg lb/hr	Max lb/hr	Tons/Year												
Bayou Couba Central Facility															
EOT 0001 GLYEX	0.008	0.008	0.03	0.009	0.009	0.04	0.001	0.001	<0.01	<0.001	<0.01	<0.001	<0.001	<0.01	<0.01
EOT 0009 ENG1	3.79	5.50	16.60	2.45	3.56	10.74	0.01	0.015	0.04	0.001	0.001	<0.01	0.03	0.05	0.05
EOT 0011 GEN1	2.11	2.11	9.22	1.36	1.36	5.97	0.006	0.006	0.02	<0.001	<0.01	0.02	0.02	0.02	0.08
EOT 0012 HT1	0.12	0.12	0.51	0.14	0.14	0.61	0.011	0.011	0.05	0.001	<0.01	0.009	0.009	0.009	0.04
EOT 0013 P1													20.99	20.99	0.27
EOT 0014 P2													20.99	20.99	0.27
EOT 0015 P3													12.60	12.60	0.16
EOT 0016 P4													8.40	8.40	0.03
EOT 0017 P5													0.017	0.017	0.04
EOT 0018 P6													0.017	0.017	0.04
EOT 0019 P7													0.017	0.017	0.08
EOT 0020 P8													20.99	20.99	0.27
EOT 0024 GLYNT													0.55	0.55	2.42
EOT 0025 HT2	0.16	0.16	0.68	0.19	0.19	0.81	0.014	0.014	0.06	0.001	<0.01	0.007	0.007	0.03	
EOT 0026 comp1	2.72	2.72	11.91	2.22	2.22	9.71	<0.001	<0.001	<0.01	0.003	0.003	0.01	0.59	0.59	2.60
EOT 0027 GEN2	1.04	1.04	0.03	4.81	4.81	0.12	0.34	0.34	0.01	0.32	0.32	0.01	0.33	0.33	0.01
EOT 0028 ENG3	1.97	1.97	8.65	1.28	1.28	5.59	0.005	0.005	0.02	<0.001	<0.01	0.02	0.02	0.02	0.07
EOT 0029 ENG4	1.40	1.55	6.11	0.90	1.00	3.95	0.004	0.004	0.02	<0.001	<0.01	0.012	0.013	0.013	0.05
EOT 0030 ENG5	0.80	0.80	0.88	3.72	3.72	4.06	0.26	0.26	0.29	0.25	0.25	0.27	0.26	0.26	0.28
EOT 0031 TNK4													0.12	0.12	0.51
EOT 0032 TNK5													0.11	0.11	0.47
EOT 0033 001													13.88		
EOT 0034 002													12.18		

EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 31293 - Bayou Couba Central Facility
Activity Number: PER20080002
Permit Number: 2520-00095-01
Air - Minor (Synthetic) Initial

Subject Item	CO			NOx			SO2			VOC		
	Avg lb/hr	Max lb/hr	Tons/Year									
Bayou Couba Central Facility												
EQT 0035												
003												
EQT 0036												
004												
EQT 0037												
CONTR												
FUG 0001												
FUGAREA												
GRP 0002												
							15.21	15.21		66.64	66.64	

Note: Emission rates in **bold** are from alternate scenarios and are not included in permitted totals unless otherwise noted in a footnote.

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 31293 - Bayou Couba Central Facility

Activity Number: PER20080002

Permit Number: 2520-00095-01

Air - Minor (Synthetic) Initial

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0001 GLYEX	Benzene	<0.001	<0.001	<0.01
	Formaldehyde	<0.001	<0.001	<0.01
	Toluene	<0.001	<0.001	<0.01
EQT 0012 HT1	Benzene	0.001	0.001	<0.01
	Formaldehyde	0.001	0.001	0.01
EQT 0013 P1	Toluene	<0.001	<0.001	<0.01
	Benzene	0.068	0.068	<0.01
	n-Hexane	3.54	3.54	0.05
EQT 0014 P2	Benzene	0.068	0.068	<0.01
	n-Hexane	3.54	3.54	0.05
	Benzene	0.041	0.041	<0.01
EQT 0015 P3	n-Hexane	2.13	2.13	0.03
	Benzene	0.027	0.027	<0.01
EQT 0016 P4	n-Hexane	1.42	1.42	<0.01
	Benzene	<0.001	<0.001	<0.01
EQT 0017 P5	n-Hexane	0.003	0.003	0.01
	Benzene	<0.001	<0.001	<0.01
EQT 0018 P6	Benzene	<0.001	<0.001	<0.01
	n-Hexane	0.003	0.003	0.01
EQT 0019 P7	Benzene	<0.001	<0.001	<0.01
	n-Hexane	0.003	0.003	0.01
EQT 0020 P8	Benzene	0.068	0.068	<0.01
	n-Hexane	3.54	3.54	0.05
EQT 0024 GLYVNT	Benzene	0.091	0.091	0.40
	Ethyl benzene	0.009	0.009	0.04
	Toluene	0.099	0.099	0.43
	Xylene (mixed isomers)	0.037	0.037	0.16
	n-Hexane	0.008	0.008	0.04
EQT 0025 HT2	Benzene	0.001	0.001	<0.01
	Formaldehyde	0.002	0.002	0.01
	Toluene	<0.001	<0.001	<0.01
EQT 0027 GEN2	1,3-Butadiene	0.027	0.027	<0.01
	Acetaldehyde	0.036	0.036	<0.01
	Benzene	0.031	0.031	<0.01

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 31293 - Bayou Couba Central Facility

Activity Number: PER20080002

Permit Number: 2520-00095-01

Air - Minor (Synthetic) Initial

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0027 GEN2	Formaldehyde	0.036	0.036	<0.01
EQT 0030 ENG5	1,3-Butadiene	0.021	0.021	0.02
	Acetaldehyde	0.028	0.028	0.03
	Benzene	0.024	0.024	0.03
	Formaldehyde	0.028	0.028	0.03
EQT 0031 TNK4	Benzene	0.001	0.001	0.01
	Ethyl benzene	<0.001	<0.001	<0.01
	Toluene	0.001	0.001	<0.01
	Xylene (mixed isomers)	<0.001	<0.001	<0.01
	n-Hexane	0.001	0.001	0.01
EQT 0032 TNK5	Benzene	0.001	0.001	0.01
	Ethyl benzene	<0.001	<0.001	<0.01
	Toluene	0.001	0.001	<0.01
	Xylene (mixed isomers)	<0.001	<0.001	<0.01
	n-Hexane	0.001	0.001	0.01
EQT 0033 001	Benzene		0.082	
	Ethyl benzene		0.004	
	Toluene		0.039	
	Xylene (mixed isomers)		0.013	
	n-Hexane		0.31	
EQT 0034 002	Benzene		0.063	
	Ethyl benzene		0.003	
	Toluene		0.029	
	Xylene (mixed isomers)		0.009	
	n-Hexane		0.28	
EQT 0035 003	Benzene		0.063	
	Ethyl benzene		0.003	
	Toluene		0.029	
	Xylene (mixed isomers)		0.009	
	n-Hexane		0.28	
EQT 0036 004	Benzene	<0.001	<0.001	<0.01
	Ethyl benzene	<0.001	<0.001	<0.01
	Toluene	<0.001	<0.001	<0.01

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 31293 - Bayou Couba Central Facility

Activity Number: PER20080002

Permit Number: 2520-00095-01

Air - Minor (Synthetic) Initial

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0036 004	Xylene (mixed isomers)	<0.001	<0.001	<0.01
	n-Hexane	<0.001	<0.001	<0.01
EQT 0037 CONTR	Benzene	0.002	0.002	0.01
	n-Hexane	0.12	0.12	0.52
FUG 0001 FUGAREA	Benzene	0.005	0.005	0.02
	Ethyl benzene	0.001	0.001	<0.01
GRP 0002	Toluene	0.003	0.003	0.01
	Xylene (mixed isomers)	0.001	0.001	<0.01
	Benzene	0.11		0.47
	Ethyl benzene	0.006		0.03
	Toluene	0.051		0.22
	Xylene (mixed isomers)	0.017		0.08
UNF 0001	n-Hexane	0.33		1.45
	1,3-Butadiene			0.03
	Acetaldehyde			0.04
	Benzene			1.08
	Ethyl benzene			0.11
	Formaldehyde			0.07
	Toluene			0.72
	Xylene (mixed isomers)			0.28
	n-Hexane			2.26

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals unless otherwise noted in a footnote. Emission rates attributed to the UNF reflect the sum of the TAP/HAP limits of the individual emission points (or caps) under this permit, but do not constitute an emission cap.

SPECIFIC REQUIREMENTS

AI ID: 31293 - Bayou Couba Central Facility
 Activity Number: PER20080002
 Permit Number: 2520-00095-01
 Air - Minor (Synthetic) Initial

EQT 0001 GLYEX - Glycol Reboiler

- 1 [LAC 33:III.1101.B] Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).
 Which Months: All Year Statistical Basis: None specified
 Total suspended particulate <= 0.6 lb/MMBTU of heat input.
 Which Months: All Year Statistical Basis: None specified
- 2 [LAC 33:III.1313.C]

EQT 0009 ENG1 - Waukeisha Saltwater Pump Engine (model F1197)

- 3 [LAC 33:III.1101.B] Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).
 Which Months: All Year Statistical Basis: None specified
 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).
 Which Months: All Year Statistical Basis: Six-minute average
- 4 [LAC 33:III.1311.C]

EQT 0011 GEN1 - Caterpillar Generator Engine (model 3304)

- 5 [LAC 33:III.1101.B] Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).
 Which Months: All Year Statistical Basis: None specified
 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).
 Which Months: All Year Statistical Basis: Six-minute average
- 6 [LAC 33:III.1311.C]

EQT 0012 HT1 - Heater Treater

- 7 [LAC 33:III.1101.B] Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).
 Which Months: All Year Statistical Basis: None specified
 Total suspended particulate <= 0.6 lb/MMBTU of heat input.
 Which Months: All Year Statistical Basis: None specified
- 8 [LAC 33:III.1313.C]

EQT 0024 GLVNT - Glycol Reboiler Moisture Vent/VRU

SPECIFIC REQUIREMENTS

AI ID: 31293 - Bayou Couba Central Facility
 Activity Number: PER20080002
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 Air - Minor (Synthetic) Initial

EQT 0024 GLYVNT - Glycol Reboiler Moisture Vent/VRU

- 9 [40 CFR 63.760(e)]
- 10 [40 CFR 63.774(d)]
- 11 [LAC 33:III.2116.B.2]
- 12 [LAC 33:III.2116.D]
- 13 [LAC 33:III.2116.F.1]

Maintain records as specified in 40 CFR 63.10(b)(3). Subpart HH. [40 CFR 63.760(e)]
 Equipment/operational data recordkeeping by electronic or hard copy at the approved frequency. Keep records of the information specified in 40 CFR 63.774(d)(1)(i) or (d)(1)(ii), as applicable. Subpart HH. [40 CFR 63.774(d)]
 VOC, Total >= 85 % reduction using a control device. Demonstrate percent reduction using the methods found in LAC 33:III.2116.D.
 Which Months: All Year Statistical Basis: None specified
 Determine compliance with LAC 33:III.2116.B using the methods in LAC 33:III.2116.D.1-5, as appropriate.
 Equipment/operational data recordkeeping by electronic or hard copy upon occurrence of event. Keep records of the information specified in LAC 33:III.2116.F.1.

EQT 0025 HT2 - Heater Treater

- 14 [LAC 33:III.1101.B]
- 15 [LAC 33:III.1313.C]

Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).
 Which Months: All Year Statistical Basis: None specified
 Total suspended particulate <= 0.6 lb/MMBTU of heat input.
 Which Months: All Year Statistical Basis: None specified

EQT 0026 COMP3 - Caterpillar Compressor Engine (model 3508)

- 16 [LAC 33:III.1101.B]
- 17 [LAC 33:III.1311.C]
- 18 [LAC 33:III.501.C.6]

Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).
 Which Months: All Year Statistical Basis: None specified
 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).
 Which Months: All Year Statistical Basis: Six-minute average
 Conduct a performance/emissions test. Due within 180 days after initial startup (or restart-up after modification), or within 60 days after achieving normal production rate or end of the shutdown period, whichever is earliest. The stack test's purpose is to demonstrate compliance with the emission limits of this permit and therefore must be conducted at greater than 80% of maximum permitted capacity. Repeat the test after each major engine overhaul. Test methods and procedures shall be in accordance with New Source Performance Standards, 40 CFR 60, Appendix A, Method 7E - Determination of Nitrogen Oxides Emissions from Stationary Sources and Method 10 - Determination of Carbon Monoxide Emissions from Stationary Sources. Use alternate stack test methods only with the prior approval of the Office of Environmental Assessment, Environmental Technology Division, Engineering Services. As required by LAC 33:III.913, provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits.

SPECIFIC REQUIREMENTS

AI ID: 31293 - Bayou Couba Central Facility
Activity Number: PER20080002
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 Air - Minor (Synthetic) Initial

EQT 0026 COMP3 - Caterpillar Compressor Engine (model 3508)

- 19 [LAC 33:III.501.C.6] Submit report: Due within 60 days after performance/emissions test. Submit emissions test results to the Office of Environmental Assessment. The test results summary shall include any necessary conversion into the units of any applicable Standard. (lbs/MMBtu, gr/dscf, lbs SO₂ / ton 100% H₂SO₄, Etc.) Plant and in house laboratory data to support production values shall be included. (Example: how many tons of 100% equivalent H₂SO₄ was being produced) Units tested at less than 95% of permitted maximum capacity shall provide documentation to support compliance at 100% of the permitted maximum capacity.
- 20 [LAC 33:III.501.C.6] Stack gas concentration: Carbon monoxide monitored by portable analyzer semianually (six months after the stack test or previous semianual test, plus or minus 30 days). Maintain concentrations of CO in the same range as during the initial stack test. Calibrate portable analyzers before each test using a known reference gas sample.

Which Months: All Year Statistical Basis: None specified

- Stack gas concentration: Nitrogen oxides monitored by portable analyzer semianually (six months after the stack test or previous semianual test, plus or minus 30 days). Maintain concentrations of NO_x in the same range as during the initial stack test. Calibrate portable analyzers before each test using a known reference gas sample.

Which Months: All Year Statistical Basis: None specified

- Stack gas concentration: Oxygen monitored by portable analyzer semianually (six months after the stack test or previous semianual test, plus or minus 30 days). Maintain concentrations of O₂ in the same range as during the initial stack test. Calibrate portable analyzers before each test using a known reference gas sample.

Which Months: All Year Statistical Basis: None specified

- Stack gas concentration: Submit notification: Due at least 30 days prior to any LDEQ required performance/emissions test to the Office of Environmental Assessment, to provide the opportunity to conduct a pretest meeting and observe the emission testing. Equipment/operational data recordkeeping by electronic or hard copy semianually. Recorded parameters are NO_x, CO and O₂ concentrations in the stack gas obtained during semianual testing.

EQT 0027 GEN2 - Cummins Diesel Generator Engine (model 6BT5.9-G6) (backup)

- 25 [LAC 33:III.1101.B] Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).

Which Months: All Year Statistical Basis: None specified

- Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel). Which Months: All Year Statistical Basis: Six-minute average

EQT 0028 ENG3 - Moline Saltwater Pump Engine (model 605) (backup)

- 27 [LAC 33:III.1101.B] Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).

Which Months: All Year Statistical Basis: None specified

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SPECIFIC REQUIREMENTS

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 Air - Minor (Synthetic) Initial

EQT_0028 ENG3 - Moline Saltwater Pump Engine (model 605) (backup)

28 [LAC 33:III.1311.C] Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).
 Which Months: All Year Statistical Basis: Six-minute average

EQT_0029 ENG4 - Waukeshaw Crude Oil Pipeline Pump Engine (model VRG 220)

29 [LAC 33:III.1101.B] Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).
 Which Months: All Year Statistical Basis: None specified
 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).
 Which Months: All Year Statistical Basis: Six-minute average

EQT_0030 ENG5 - Detroit Diesel Crude Oil Transfer Pump Engine (model 471)

31 [LAC 33:III.1101.B] Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).
 Which Months: All Year Statistical Basis: None specified
 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).
 Which Months: All Year Statistical Basis: Six-minute average

FUG_0001 FUGAREA - Fugitive Emissions

33 [LAC 33:III.2111] Equip all rotary pumps and compressors handling volatile organic compounds having a true vapor pressure of 1.5 psia or greater at handling conditions with mechanical seals or other equivalent equipment.

GRP_0002 - Tank Cap

Group Members: EQT 0033EQT 0034EQT 0035

SPECIFIC REQUIREMENTS

AJ ID: 31293 - Bayou Couba Central Facility
Activity Number: PER20080002
Permit Number: 2520-00095-01
Air - Minor (Synthetic) Initial

GRP 0002 - Tank Cap

34 [LAC 33:III.501.C.6]

Permittee shall comply with the limits of this permit by maintaining the total calculated VOC emissions from the Crude Oil Storage Vessels (Emission Points 001, 002 and 003) to less than or equal to 66.64 tons per year. These calculated VOC emissions shall be reported under an emissions Tank Cap (GRP0002). The overall emissions of the cap shall be calculated based on the tanks throughput and recorded each month and for the last twelve consecutive months. Records of the total calculated emissions and tank throughput for each month and for the last twelve consecutive months shall be kept on site and available for inspection by the Office of Environmental Compliance, Surveillance Division. The total overall calculated emissions above the maximum listed in this specific condition for any twelve consecutive month period shall be a violation of this permit and must be reported to the Office of Environmental Compliance, Enforcement Division. A report showing the total annual emissions emitted from the tank cap shall be submitted to the Office of Environmental Compliance, Enforcement Division by March 31 for the preceding calendar year.

UNF 0001 - Bayou Couba Central Facility

35 [LAC 33:III.1103]

Emissions of smoke which pass onto or across a public road and create a traffic hazard by impairment of visibility as defined in LAC 33:III.111 or intensify an existing traffic hazard condition are prohibited.

Outdoor burning of waste material or other combustible material is prohibited.

36 [LAC 33:III.1109.B]

37 [LAC 33:III.1303.B]

38 [LAC 33:III.2113.A]

39 [LAC 33:III.2119]

40 [LAC 33:III.537]

41 [LAC 33:III.5611.A]

42 [LAC 33:III.5611.B]

Emissions of particulate matter which pass onto or across a public road and create a traffic hazard by impairment of visibility or intensify an existing traffic hazard condition are prohibited.

Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions. Good housekeeping shall include, but not be limited to, the practices listed in LAC 33:III.2113.A.1-5.

Failure to pay the prescribed application fee or annual fee as provided herein, within 90 days after the due date, will constitute a violation of these regulations and shall subject the person to applicable enforcement actions under the Louisiana Environmental Quality Act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance.

Comply with the Louisiana General Conditions as set forth in LAC 33:III.537.

Submit standby plan for the reduction or elimination of emissions during an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency. Due within 30 days after requested by the administrative authority.

During an Air Pollution Alert, Air Pollution Warning or Air Pollution Emergency, make the standby plan available on the premises to any person authorized by the department to enforce these regulations.